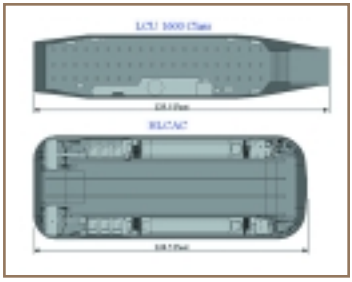
TACTICAL SURFACE LIFT

Technological advances in tactical surface lift are moving *Expeditionary Maneuver Warfare* from the realm of concept to reality. In addition to the Marine Corps Expeditionary Fighting Vehicle (EFV), two Navy initiatives are critical in this regard. The first is the Landing Craft Air Cushion (LCAC), a high-speed, fully amphibious craft capable of carrying a 60-ton payload at speeds in excess of 40 knots to a nominal range of 200 nautical miles. The LCAC's ability to ride on a cushion of air allows these craft to operate directly from the well decks of amphibious warships and to access more than 70% of the world's beaches, compared with 17% for conventional landing craft.

A service life extension program (SLEP) began in late 2000 for the 74 active LCACs. This SLEP includes major refurbishment that will extend the lives of these craft to 30 years. LCACs initially go through a system upgrade that includes the replacement of obsolete radios and radar, the installation of the Enhanced Position Location Reporting System (EPLRS), corrosion abatement, and the replacement of the current skirt system with an improved deep skirt. LCAC SLEP provides engine upgrades and refurbishes the hull, thus increasing the LCACs' performance envelopes. Lastly, Phase II provides a "C4N" – Command- Control Communications- Computers-and Navigation



– upgrade that replaces the crafts' deteriorating and obsolete electronic suites.

The Landing Craft Utility Replacement (LCU(R)) is the second effort and will provide an improved heavy-lift landing craft to complement the high-speed, over-the-horizon, ship-to-objective amphibious lift required for EMW and sea-based logistics support. LCU (R) characteristics include an increased payload capacity (up to three M1A1 tanks), the ability to conduct independent operations of up to 10 days, a range of 1,000 nautical miles, increased speed, and a greater cargo-carrying capacity. The craft will have a drive-through capability that will enable vehicles to drive straight onto the craft, therefore reducing loading time.